



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,022	10/10/2003	Kei Yasuna	520.43197X00	8013

20457 7590 07/20/2005

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER

MERCEDES, DISMERY E

ART UNIT PAPER NUMBER

2651

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/682,022

Applicant(s)

YASUNA ET AL.

Examiner

Dismery E. Mercedes

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4 and 5 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2003 and 15 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on February 15th, 2005 has been entered.

Response to Arguments

2. After careful consideration, the indicated allowable subject matter in the office action dated November 17, 2005 has been withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 4 is rejected under 35 U.S.C. 102(e) as being anticipated by Belser (US 6,643,082).

Belser discloses a servo pattern recording method for a disk apparatus, having a magnetic disk for recording information thereon (col.5, lines 3-4); a head having a write element for use of recording information onto said magnetic disk and a read element for reproducing information from said magnetic disk (col.5, lines 11-12); and an actuator for moving said head to a desired radial position on said magnetic disk (col.5, line 17-20), comprising the following steps of: recording a servo pattern for positioning of said head on a recording surface of said magnetic disk; recording marker patterns for detecting passage time of said head (col.5, line 55-57) disposing in a front and a rear of said burst pattern for detecting a radial position of said head, respectively, on a track in a circumferential direction, on said servo pattern recoded on the recording surface of said magnetic disk (col.5, lines 5-6 and lines 55-58); and conducting a self servo write operation by said magnetic

Art Unit: 2651

disk apparatus with using said servo pattern; wherein a distance is measured between the servo patterns neighboring to each other by reproducing two (2) of said servo patterns neighboring to each other in the circumferential direction, which are recorded on the recording surface of said magnetic disk and upon basis of this distance measured is adjusted a timing-of writing when recording a new servo pattern when conducting said self servo write operation (col.8, lines 53-65)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belser (US 6,643,082) in view of Baker et al., hereinafter, Baker, (US 6,704,156 B1).

Belser discloses servo pattern recording method for a disk apparatus as claimed in claim 4, but fails to explicitly teach wherein the marker pattern of said servo pattern written on the recording surface of said magnetic disk is shifted with respect to the marker pattern of said servo pattern, which is written neighboring thereto in the circumferential direction of said magnetic disk, by a half of width thereof, on the position in a radial direction thereof.

However, Baker et al. teaches marker pattern of said servo pattern (servo bursts) written on the recording surface of said magnetic disk is shifted with respect to the marker pattern of said servo pattern, which is written neighboring thereto in the circumferential direction of said magnetic disk,

Art Unit: 2651

by a half of width thereof, on the position in a radial direction thereof (as depicted in FIG.12, col.17, lines 5-10, and 15-21).

Therefore, it would have been obvious to one of ordinary skill in the art to have implemented Baker's technique on the apparatus as taught by Belser, because it would the magnetic disk apparatus taught by Belser with the enhanced capability of writing servo pattern that can be self servo written based upon position and timing information (col.17, lines 13-14 of Baker et al.).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Schultz et al. (US 6,429,989 B1), Ehrlich et al. (US 6,519,107 B1); Baker et al. (US 6,304,407); Yatsu (US 6,738,215 B2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dismery E. Mercedes whose telephone number is 571-272-7558. The examiner can normally be reached on Monday - Friday, from 9:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dismery E Mercedes
Examiner
Art Unit 2651

DM




DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600